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FOOD WASTE REDUCTION IN EUROPE: MULTI-STAKEHOLDER PARTNERSHIPS LESSONS FOR THE GLOBAL SOUTH

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Abstract:

Food waste is a critical global issue with significant environmental, economic, and social consequences. This paper investigates the efficacy of multi-stakeholder partnerships in addressing food waste, specifically focusing on lessons learned from European initiatives for application in the Global South. This study uses qualitative research methods that involve a review of existing literature and a case study analysis of the initiatives taken by the International Food Waste Coalition (IFWC). This study evaluates the impact of multi-stakeholder partnerships in food waste reduction efforts. Key themes such as collaboration, measurement, innovation, and policy advocacy emerge as critical factors in multi-stakeholder partnerships' effectiveness. By examining the strategies and outcomes of the IFWC, this paper provides insights and recommendations applicable to regions facing similar challenges. The findings contribute to ongoing discussions on food waste management and sustainable development, emphasizing the pivotal role of multi-stakeholder partnerships in promoting collaboration between different stakeholders from different sectors worldwide and driving meaningful change on a global scale.

Keywords: Multi-Stakeholder Partnerships (MSP), Food Waste, International Food Waste Coalition (IFWC), Global South, Sustainability

INTRODUCTION

The issue of food waste is a major global issue that has significant consequences for the environment, the economy, and society. For this research paper, the term "food waste" is used following the definition provided by the United Nations, encompassing both food waste and food loss. It includes the food discarded at the consumption stage, commonly referred to as "food waste," and the food lost during its production, post-harvest, and process, commonly referred to as "food loss."

According to the report released by the United Nations Environmental Programme (UNEP), around 931 million tonnes of food produced for people to consume are wasted every year. This waste contributes to the emission of greenhouse gases, economic losses, and food insecurity (UNEP, 2021). In other words, addressing food waste is not only focused on minimizing the waste but is automatically linked to broader sustainability objectives. Reducing food waste is essential to make substantial progress towards achieving sustainable consumption and production habits, contributing to a more sustainable and resilient society. Therefore, in response to this global challenge, the United Nations (UN) has instituted the Sustainable Development Goals (SDGs), which consist of 17 interconnected goals designed to achieve a more sustainable future for all. The UN dedicated SDG 12 to promote responsible consumption and production (UN, 2016).

Under SDG 12, target 12.3 seeks to decrease global food waste per person by 50% at the retail and consumer stages and mitigate food losses throughout the production and supply chains, including losses after harvesting, by 2030. Reaching this objective would decrease the environmental consequences of food waste and lead to financial savings and improved food security. However, the advancements toward attaining SDG target 12.3 must be more robust and consistent (World



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technologies or solutions to reduce food waste and provide data and insights that inform the coalition's strategies and actions.

Non-governmental organizations included in IFWC work towards a specific cause or mission, which in this context focuses on reducing food waste. They partner with the IFWC to amplify their impact and reach. The Pledge on Food Waste, a commitment by businesses to reduce food waste, and Wrap Global, which works with governments, businesses, and communities to achieve a circular economy, are examples of non-governmental organizations working with the IFWC. These organizations may launch campaigns to raise awareness about food waste, mobilize volunteers or donors, and implement community-based programs to reduce food waste.

Government agencies working with IFWC are public-sector organizations that can influence policy and regulations related to food waste and provide support and resources to the IFWC's initiatives. An example might be a national environmental agency or a ministry of agriculture. They may introduce policies that encourage or require food waste reduction, provide funding or incentives, and monitor and enforce compliance with food waste regulations.

Through these collaborative efforts, the IFWC's stakeholders aim to create a more sustainable food system and achieve their goal of reducing food waste by 50% by 2025. This multifaceted approach requires the commitment and cooperation of all stakeholders involved.

The IFWC's Strategies and Actions Taken. The IFWC employs various strategies and actions to reduce food waste by 50% in 2025. First, IFWC fosters collaboration among its members and partners, which include private businesses, international organizations, academic institutions, non-profit organizations, and government agencies. By working together, these stakeholders can better identify, measure, understand, and find solutions to waste and build a more sustainable food system. After that, IFWC also developed a food waste measurement methodology that all its members adopted. This methodology allows for the accurate tracking of food waste levels, which is crucial for assessing the effectiveness of food waste reduction strategies. Third, IFWC is involved in several innovative projects to reduce food waste. For example, it has teamed up with the French Agency for Environment and Energy Management (ADEME) and Too Good to Go to launch a study evaluating the impact of buffets on food waste in hotels and restaurants. The initiative focuses on auditing current practices, testing food waste reduction solutions, and producing a guide to communicate best practices.

Furthermore, IFWC's "Do Good: Save Food" campaign is set to launch in Turkey, with teaching manuals being distributed to 6 million students, teachers, and parents across the country. This initiative aims to raise awareness about food waste and encourage behaviors that reduce food waste. Finally, within its Voluntary Agreement (VA) framework, the coalition has defined a 5-year roadmap to drastically reduce food waste along the hospitality and food service value chain. As part of this agreement, IFWC is launching five new projects to tackle key food waste reduction challenges.

IFWC is making significant progress towards its goal through these strategies and actions. In 2022, the IFWC food waste reduction indicator was reported at 23%, meaning those sites reporting reliable data are halfway to achieving the goal of reducing food waste by 50% in 2025 (IFWC, 2016).

Evaluation of the Effectiveness of the IFWC's Strategies. The IFWC has implemented various strategies to combat food waste, and their effectiveness can be evaluated in several ways. Firstly, the IFWC's emphasis on collaboration is a key strength. The coalition fosters a holistic approach to food waste reduction by bringing together stakeholders from various sectors. This multi-stakeholder approach allows for sharing of resources, expertise, and best practices, which can significantly enhance the effectiveness of food waste reduction strategies. Secondly, the IFWC's commitment to



measuring and reporting is crucial for assessing progress and identifying areas for improvement. Their food waste measurement methodology provides a standardized way of tracking food waste levels, enabling members to assess the impact of their food reduction efforts accurately. This data-driven approach is essential for ensuring accountability and driving continuous improvement. Thirdly, the IFWC's focus on innovation is a crucial driver of progress. By supporting innovative projects and technologies, the coalition is helping to develop new solutions to the food waste problem. These innovations could reduce food waste and significantly transform the food system.

However, while the IFWC significantly reduces food waste, it faces several limitations. The IFWC primarily operates in Europe, and its initiatives are largely focused on this region. While it has a global reach, its impact in other regions, particularly developing countries, may be limited due to geographical limitations. As a non-profit organization, the IFWC relies on funding from its members, partners, and other sources. Limited resources can constrain the scope of its initiatives and the pace at which it can scale up its efforts.

Moreover, food waste is a complex issue that involves multiple stages of the food supply chain, from production to consumption. Addressing this problem requires coordinated action at all these stages, which can be challenging. The success of the IFWC's initiatives largely depends on the commitment and action of its members and partners. These stakeholders must fully embrace the coalition's strategies and take concrete steps to reduce food waste to maintain the effectiveness of these initiatives. After that, the IFWC operates in a complex regulatory environment, with different countries having different laws and regulations related to food waste. Navigating this environment and advocating for policy changes can be challenging. Accurate data on food waste is crucial for measuring progress and identifying areas for improvement. However, data availability and quality can be a challenge, particularly in countries of sectors where food waste is not systematically tracked.

Therefore, the IFWC's strategies are well-conceived and have the potential to make a significant impact; their effectiveness will ultimately depend on the extent to which they are implemented and embraced by the coalition's members and partners. The progress made so far is encouraging, but much work still needs to be done to achieve the coalition's ambitious goals.

Benefits and Challenges of Multi-Stakeholder Partnerships in the Global Fight Against Food Waste. On the one side, multi-stakeholder partnerships, such as the one formed by the IFWC, offer several benefits in reducing food waste. Each stakeholder brings unique knowledge, skills, and experiences to the table. This diversity can lead to more innovative and practical solutions to the complex issue of food waste. In a multi-stakeholder partnership, all parties are responsible for achieving the common goal. This shared responsibility can foster a sense of accountability and motivate stakeholders to contribute to the partnership's efforts actively. By working together, stakeholders can amplify their impact and reach a wider audience. For example, a business can implement food waste reduction strategies in its operations, while a non-profit organization can raise awareness about food waste among the public.

Furthermore, multi-stakeholder partnerships allow for the pooling of resources, which can lead to cost savings and increased efficiency. Resources can include funding, personnel, technology, data, and more. Finally, a coalition of diverse stakeholders can have a stronger voice in advocating for policy changes that support their cause. For example, the IFWC can leverage its collective influence to advocate for policies that reduce food waste. Consequently, multi-stakeholder partnerships like IFWC are crucial in addressing complex global issues like food waste. By bringing together diverse stakeholders and fostering collaboration, these partnerships can drive significant progress towards a more sustainable future.

Conversely, multi-stakeholder partnerships, such as IFWC, can face several challenges to reduce global issues like food waste. First, different stakeholders may have different priorities, goals, and strategies. Aligning these diverse interests towards a common goal can be challenging. For instance, a private business might prioritize cost-effectiveness, while a non-profit organization might focus on environmental impacts. Second, effective communication and coordination among various stakeholders is crucial for the partnership's success. However, differences in language, culture, and operational styles can pose significant challenges. Third, determining how to allocate resources, such as funding, personnel, and technology, can be complex. Stakeholders may have differing views on distributing resources, leading to conflicts. After that, ensuring accountability and transparency among all stakeholders can be difficult. It requires robust monitoring and reporting mechanisms, which can be resource-intensive to implement and maintain. Finally, navigating the regulatory and legal landscape can be challenging, primarily when the partnership operates across different countries. Compliance with different laws and regulations can be complex and costly.

Despite these challenges, multi-stakeholder partnerships like the IFWC are crucial in addressing complex global issues such as food waste. Acknowledging and addressing these challenges can make such partnerships more effective in achieving their goals.

Challenges Faced by the Global South in Reducing Food Waste. The Global South, comprised chiefly of developing countries, faces several unique challenges in reducing food waste, particularly at the production level. Inefficient harvesting methods, often due to a lack of access to modern machinery and technology, can lead to significant food loss right at the beginning of the supply chain (UNEP, 2021). It is compounded by inadequate storage and cooling facilities, which can result in rapid spoilage of harvested products before they even reach the market. Poor quality packing and manufacturing processes further exacerbate the problem, leading to damage and waste during transportation and processing (UNEP, 2021).

Additionally, the global south often needs more robust infrastructure for food distribution, which can lead to delays and inefficiencies that result in food waste (Soma et al., 2020). Another major challenge is more awareness and knowledge about food waste and its environmental and economic impacts (Nicastro & Carillo, 2021). It can result in behaviors and practices at all levels – from farmers to consumers – contributing to food waste. Moreover, many countries in the global south lack comprehensive policies and regulations to manage food waste (CHLPI, 2023; Krishna Bahadur et al., 2016). Without a supportive policy environment, initiatives to reduce food waste may struggle to achieve significant impact. Lastly, data availability and quality can be challenging, particularly in countries or sectors where food waste is not systematically tracked (UNEP, 2021). Accurate data on food waste is crucial for measuring progress and identifying areas for improvement.

Despite all these challenges, there are also opportunities for the global south to learn from initiatives such as the IFWC. For instance, the IFWC's multi-stakeholder approach, emphasis on measurement and reporting, support for innovation, and work in influencing policy all provide valuable lessons for tackling food waste in the global south. However, these strategies need to be adapted to the specific context and needs of the global south.

Lessons Learned for the Global South from IFWC's Initiatives. The IFWC initiatives offer many lessons that can be applied to the global south. The IFWC's multi-stakeholder approach, which brings together diverse actors from the private sector, international organizations, academic institutions, non-profit organizations, and government agencies, underscores the power of collaboration in addressing complex issues like food waste. This approach can be replicated in the



Moreover, multi-stakeholder partnerships facilitate shared responsibilities and accountability. By working together, stakeholders can pool their resources, share risks, and leverage their collective influence to drive change. This shared responsibility fosters a sense of ownership and commitment among stakeholders, enhancing the sustainability and impact of their initiatives. However, multi-stakeholder partnerships also face significant challenges. Aligning diverse interests, ensuring effective communication and coordination, managing resource allocation, and navigating complex regulatory environments are just a few of the hurdles these partnerships must overcome. Despite these challenges, the potential benefits of multi-stakeholder partnerships far outweigh the difficulties. In other words, multi-stakeholder partnerships are crucial in addressing global issues. They embody the spirit of cooperation and collaboration essential for tackling our time's complex challenges. By bringing together stakeholders and fostering shared responsibility and accountability, these partnerships can drive significant progress towards a more sustainable and equitable world. As we move forward, we must continue to leverage and strengthen these partnerships to meet the pressing challenges of our time.

Potential for these Types of Partnerships to Address Other Global Issues. Multi-stakeholder partnerships like the IFWC have immense potential to address many global issues. By bringing together diverse actors from various sectors, these partnerships can foster collaboration, pool resources, and leverage collective influence to drive change on a global scale. In our increasingly interconnected world, challenges such as climate change, poverty, and inequality are no longer confined to national borders or single sectors. Multi-stakeholder partnerships can play a crucial role in mitigating climate change. They can facilitate collaboration between governments, businesses, and civil society groups to reduce greenhouse gas emissions, promote renewable energy, and implement climate adaptation strategies. Partnerships can also help address poverty and inequality by promoting inclusive economic growth and social development. They can bring together governments, businesses, non-profit organizations, and communities to create jobs, improve access to education and healthcare, and empower marginalized groups.

After that, multi-stakeholder partnerships can enhance global health outcomes by pooling resources and expertise to combat diseases, improve healthcare systems, and promote health equity. They can foster collaboration between health organizations, governments, and the private sector to address health challenges. Partnerships can also improve access to quality education by bringing together different actors involved in this matter. The stakeholders can work together to improve educational infrastructure, train teachers, and develop educational materials. Finally, multi-stakeholder partnerships are central to achieving the United Nations' Sustainable Goals (SDGs). They can foster collaboration across sectors and borders to address complex challenges related to poverty, inequality, climate change, environmental degradation, peace, and justice. Multi-stakeholder partnerships offer a powerful model for addressing global issues. They can drive significant progress towards a more sustainable and equitable world by fostering collaboration and pooling resources.

These complex issues necessitate comprehensive and collaborative solutions that transcend geographical, sectoral, and disciplinary boundaries. Such partnerships bring together actors, including governments, non-profit organizations, academic institutions, and civil society groups, to achieve a common goal. Each stakeholder brings unique perspectives, resources, and capabilities, enriching the problem-solving process. This diversity fosters innovation and creativity, providing more robust and practical solutions. Moreover, multi-stakeholder partnerships facilitate shared responsibility and accountability. By working together, stakeholders can pool their resources, share risks, and leverage their collective influence to drive change. This shared responsibility fosters a

This paper has shed light on the crucial role of multi-stakeholder partnerships in tackling the global issue of food waste. However, there are several potential areas for further exploration. One such area is the investigation of the scalability and adaptability of multi-stakeholder partnership models, especially in the context of the global south, where the challenges related to food waste may significantly differ. Understanding the elements contributing to the successful implementation and adaptation of multi-stakeholder partnerships could lead to developing more effective strategies for reducing global food waste. Another promising area of research is the examination of the long-term impacts and sustainability of multi-stakeholder partnership initiatives. It could provide valuable insights into the endurance of collaborative approaches in effecting sustainable change.

Additionally, exploring the role of emerging technologies and data-driven solutions within the framework of multi-stakeholder partnerships could yield innovative strategies for enhancing food waste reduction efforts. Finally, conducting comparative studies across various multi-stakeholder partnerships that address different global challenges could facilitate learning and knowledge exchange across sectors, ultimately improving the effectiveness of collaborative approaches in tackling complex issues beyond food waste. These potential areas for future research deepen the understanding of the dynamics of multi-stakeholder partnerships and contribute to developing more impactful interventions in addressing global sustainability challenges.

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